N° 64 NOVEMBER 2020

IGRGEA LETTER

International Geophysical Research Group /Europe-Africa
International Geophysical Research Group /Europe-Asia

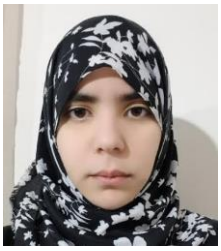
IGRGEA

At the end of the IEEY (International Equatorial Electrojet Year), in 1995, IGRGEA (International Geophysical Research Group Europe Africa) has been organized to follow the research work initiated during IEEY, in 1992. Since January 2003 IGRGEA has been established at the Institute of Geophysics in Hanoï, Vietnam.

The last letter, No. 63, dated May 2020.

ALGERIA

Merien BACHI defended her master's degree in November 2020. She was supervised by Naima ZAOURAR (Houari Boumédiène University of Science and Technology).



Theme of the master : Study of the variations of the ionospheric total electron density by applying the IRI-2016 model and comparison with the IGS -CODG maps at middle and low latitudes in Algeria.

BENIN

Pape Abdoulaye BARRO defended his PhD, on August 5, at the University of Abomey-Calavi (UAC), the Abdus Salam International Center for Theoretical Physics (ICTP), in the field: « *Information Technology and Communication (ICT) Contributions for sustainable, smart and future Internet-based (IoT) cities for developing countries*. »

The composition of the jury was:

Chairman: Mr. Eugène C. EZIN, Full Professor, University of Abomey-Calavi (UAC), Benin.

Referees : 1) Mr. Cheick SARR, Full Professor, University of Thiès, Senegal, 2) Mr. Ahmed D. KORA, Full Professor, e-INOV Laboratory, ESMT, Senegal, 3) Mr. Théophile K. DAGBA, Master of conference, ENEAM / UAC, Benin.

Examiner: Mr. Marc K. ASSOGBA, Senior Lecturer, EPAC / UAC, Benin.

PhD Director: M. Léonard TODJIHOUNDE, Full Professor, IMSP / UAC, Benin

On the photo from left to right : Mr. Théophile K. DAGBA, Mr. Léonard TODJIHOUNDE, Mr. Jules DEGILA, Dr. Pape Abdoulaye BARRO, Mr. Eugène C. EZIN, Mr. Marc K. ASSOGBA.

BURKINA FASO

Pétronille KAFANDO from the University of Ouagadoudou in Burkina Faso, defended her state thesis at the Félix Houphoüet Boigny University in Abidjan on August 19, 2020, on the theme: *« Gravity waves in the lower equatorial and tropical stratosphere of West Africa ».*

From left to right on the photo The members of the jury present: Prof. Arsène T. KOBEA (thesis director), Prof. Jules Abodou TENON (President), Dr P. KAFANDO and Prof. Delfin OCHOU examiner).

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By videoconference the other members of the Jury, M. Petitdidier (thesis co-director) in Paris, **Referees:** A. Hauchecorne from Stockolm and M. Fodé in Niamey, and F. Chane-Ming (thesis co-supervisor) at La Réunion (see image above). For more information on the members of the Jury see letter n ° 63 from GIRGEA.

CÔTE D'IVOIRE

On October 13, Prof. Arsène KOBEA (State thesis in 2000) has been appointed Director of the Cabinet of the Minister of Higher Education and Prof. Vafi DOUMBIA (State thesis in 2008) has been appointed Director General of Higher Education.

MOROCCO

Dr Mohamed KAAB was recruited as an assistant professor of higher education at the national school of applied sciences, ENSA, of Béni Mellal in Morocco. He defended his PhD thesis on November 30, 2019 on the theme: « *Exploration of thermospheric-ionospheric coupling via optical instruments: RENOIR experiment* ». See letter n ° 63 from GIRGEA.

DRC

Raphaël MUKANDILA defended his thesis on September 30, 2020 at the University of Strasbourg, on the theme: « *Analysis of GNSS data from the African continent from 1994 to 2017: Characterization of tectonic movement and deformation* ». This thesis was announced in letter n ° 63 of GIRGEA, see letter n ° 63 of GIRGEA for more information on the Jury

On the photo, from left to right, the referees Pierre Briole and Olivier Dauteuil, the President of the Jury, Mustapha Meghraoui and the Thesis Director, Frédéric Masson.

Photo of Raphaël's thesis defense

SENEGAL

During the last space weather school organized by GIRGEA and the University of Thiès, in Thiès, Senegal from October 15 to 25, 2019, two students were selected to continue studies on the themes addressed during the school. These two students just defended their masters.

Amath NDAO :

"Effects of ionospheric scintillation in the equatorial zone on positioning by GPS. "

Pauline Sanou FAYE:
"Study of the influence of the troposphere on the propagation of radio waves. "

The University of Thiès and JPO EGNOS-Afrique have signed a collaboration agreement between the two institutions. This protocol concretizes the relations between the academic world and the world of practical applications and will allow students to train in the space field.

TUNISIA

Dr Ahmed AMMAR was recruited at the grade of Assistant at the University of Carthage, and assigned to IPEST - Preparatory Institute for Scientific and Technical Studies.

Dr Ahmed AMMAR defended his thesis, entitled: "Study of ionospheric disturbances through VLF waves", on November 30, 2017 at the University of Tunis El Manar.

Workshop on GNSS and Space Weather October 5 and 6, 2020

You can find all the presentations made during the GNSS workshop on October 5 and 6 at the link : http://indico.ictp.it/event/9124/other-view?view=ictptimetable

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35 papers
First author from eleven different countries:
Algeria, Burkina Faso, Côte d'Ivoire, Spain, France, Guinea Conakry, Morocco, Nigeria, Pakistan, Tunisia, Vietnam

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